Listing of Claims:

1. (Original) A light source (1), having at least one LED (2)

- for emitting a primary radiation (4) and

- at least one luminescence conversion body (3) for converting the primary radiation (4) into a secondary radiation (5),

characterized in that

- the luminescence conversion body is a polycrystalline ceramic body which itself acts partly or completely as luminescent material by virtue of at least part of the base material which forms the ceramic body being activated by a dopant.

2. (Original) The light source as claimed in claim 1, the ceramic body (3) being translucent to the primary radiation (4) and/or to the secondary radiation (5).

3. (Original) The light source as claimed in claim 1, the ceramic body (3) having a transmission of above 60% for secondary radiation (5) of a specific wavelength.

4. (Original) The light source as claimed in claim 1, the ceramic body (3) having a ceramic density of above 90%, preferably of at least 95%.

5. (Original) The light source as claimed in claim 1, the ceramic body (3) comprising crystallites having a mean equivalent diameter from the range of 1 jim to 100 jim inclusive, preferably 10 to SOjim.

6. (Original) The light source as claimed in claim 1, the luminescent material being a cerium-doped yttrium aluminum garnet.

7. (Original) The light source as claimed in claim 1, the LED (2) having a semiconductor material selected from the group of GaInN and/or GaN.

8. (Original) The light source as claimed in claim 1, the ceramic body (3) being assigned a multiplicity of LEDs.

9. (Original) The light source as claimed in claim 1, the ceramic body (3) being a carrier body (6) of the LED (2).

10. (Original) The light source as claimed in claim 1, a connecting layer (7) for fixedly connecting the LED (2) and the ceramic body (3) being present between the LED (2) and the ceramic body (3).

11. (Original) The light source as claimed in claim 10, the connecting layer (7) having an adhesive (8).

12. (Original) The light source as claimed in claim 1 the ceramic body (3) having at least one optical element (10) for influencing a beam path of the primary radiation (4) and/or a beam path of the secondary radiation (5).

13. (Original) The light source as claimed in claim 12, the optical element (10) being arranged at at least one surface section (11) of the ceramic body (3).

14. (Original) The light source as claimed in claim 13, the luminescence body being formed as a lens (14).

15. (Original) The light source as claimed in claim 12, the optical element (10) being at least one element which scatters the primary radiation (4) and/or the secondary radiation (5).

16. (Original) The light source as claimed in claim 12, characterized in that the optical element is formed from a multiplicity of scattering centers, the scattering centers of the optical element comprising either pores within the ceramic body or impurity crystallites from the group of aluminum oxide, titanium oxide, yttrium aluminum garnet (YAG) and/or yttrium oxide within the ceramic body formed from base crystallites, the impurity crystallites preferably being chemically related to the base crystallites, in particular yttrium oxide as impurity crystallites in base crystallites made of YAG.

17. (Currently amended) A method for producing a luminescence conversion body of a light source as claimed in ~~one of claims 1 to 16~~ claim 1 having the following method steps:

a) provision of a polycrystalline ceramic body made of a ceramic base material and

b) doping of the ceramic body with a dopant, so that the ceramic body acts as luminescent material, by a procedure in which the dopant or a corresponding chemical precursor is applied to the ceramic body, in particular only to part of the ceramic body, and is subsequently diffused into the ceramic body through thermal treatment by means of elevated temperature.

18. (Original) The method as claimed in claim 17, the application being carried out by means of a coating method selected from the group of spin-on methods, dip methods and/or drop methods.

19. (Original) The method as claimed in claim 18, the uniting of the ceramic body made of the ceramic base material and the solution of the dopant and/or the thermal treatment being carried out repeatedly.

20. (Original) The method as claimed in claim 17, a ceramic body with a ceramic base material selected from the group of aluminum oxide, yttrium aluminum garnet and/or yttrium oxide being used.